

16 Of Princesses, Paladins, and Players: Gender Stereotypes in Video Games¹

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Introduction

The video game medium fascinates both men and women. In fact, women play games at a rate nearly equal to men in countries like the United States (Entertainment Software Association, 2016¹), the United Kingdom (Ukie, 2017²), or Germany (BIU, 2016³). However, men and women substantially differ in what games they prefer (e.g., Cruea & Park, 2012; see also Lange & Schwab, this volume) and how they play (Poels, De Cock, & Malliet, 2012; Williams, Consalvo, Caplan, & Yee, 2009). Therefore, the reason for the evident gender differences in game preferences and play styles has to be sought either within the individuals or the video game medium itself. Video games have been labeled ‘boys’ toys’ and accused of suffering from an extensive male bias (Lucas & Sherry, 2004), or even representing a self-contained male space, where playing video games is an activity created by men and for men (Fox & Tang, 2014). The present chapter tries to elucidate this rather gloomy characterization with a focus on gender representation. A number of factors have been identified for the apparent gender discrepancy in video games (see also Lange & Schwab, this volume). This includes the greater availability of games and gaming equipment in boys’ homes and the competitive and violent nature of many games that serve the evolved male interest in competition but are incompatible with the female gender role (e.g., Hartmann, Möller, & Krause, 2014). A third major reason relates to how gender is typically portrayed in video games, in terms of the characters’ abilities, behavior, and appearance. In this regard, the representation of female game characters has been characterized as “a perplexing issue for social scientists” (Lynch, Tompkins, van Driel, & Fritz, 2016, p.13).

The present analyses will draw on theoretical considerations that attribute gender differences in gaming either to evolved dispositions or to the differing placement of women and men in the social structure (Eagly & Wood, 1999). As will be described below, presentation and typical roles of male and female video game characters appear to be in line with both accounts.

Gender Stereotypes, Gender Roles, and Video Games

Gender stereotypes, like all social stereotypes, are cognitive structures aimed at helping to categorize a person in a social group on the basis of attributes that are believed to be characteristic for the whole group as well as for its individual members (e.g., Mealey, 2000).

¹ Melzer, A. (2019). Of princesses, paladins, and player motivations: Gender stereotypes and gendered perceptions in video games. In D. Pietschmann, B. Liebold, B. Lange & J. Breuer (eds.), *Digital hunter-gatherers: An evolutionary psychology approach to digital games* (pp. 205-220). London: Routledge.

The process of stereotyping disregards individual characteristics, in favor of group membership (Jussim, Nelson, Manis, & Soffin, 1995). Gender stereotypes include socially shared constructs about characteristic and desirable attributes as well as proscriptive traits for women and men (Prentice & Carranza, 2002). Cultural reshaping and emphasizing of evolved dispositions led to notions over time about how men and women should be (and should not be). These notions, then, have become normative in society, comprising “behavior patterns, attitudes, and personality characteristics stereotypically perceived as masculine or feminine within a culture” (Colman, 2015, p. 309). Gender related standards for the male role include competitiveness, strength and power, risk-taking, rationality, dominance, aggression, and the eschewal from traditional femininity (David & Brannon, 1976). Traditional feminine characteristics are, for instance, sensitivity, submissiveness, or nurturance (Berger & Krahé, 2013). It has to be noted that these gender standards may, at least partly, reflect existing differences between the sexes (cf. Wühr, Lange, & Schwarz, 2017). Thus, whether or not particular gender stereotypes are accurate should be addressed empirically, not ideologically (cf. Wühr et al., 2017). The notions about gender-related stereotypes described above extend to playing habits. For example, parents, teachers, and peers reward gender-typical play and punish gender-atypical play (Etaugh & Liss, 1992). Similarly, in the video game medium young men are encouraged and young women discouraged from engaging in cross-sex stereotyped activities by way of social reward and sanction (Lucas & Sherry, 2004).

Innate or Learned? Theoretical Considerations on Gender Stereotypes

Two competing theoretical accounts have been proposed on the differences between the sexes. Although both theories offer a functional analysis of behavior that emphasizes adjustment to environmental conditions, they fundamentally differ in attributing sex differences either to evolved dispositions that differ by sex, or to social structural processes emanating from differing placement of women and men in the social structure (Eagly & Wood, 1999).

According to the evolutionary perspective, human sex differences reflect adaptations to the pressures of different adaptive problems that females and males were facing during primeval times (so-called environments of evolutionary adaptedness, EEA; Buss, 2015). To ensure their survival and maximize their reproductive success, women and men developed different psychological mechanisms specific to each problem domain (Eagly & Wood, 1999). For men, competing with other men for sexual access to women led to evolved dispositions that favor violence, competition, and risk-taking. In this regard, aggressive multiplayer video games provide a perfect field of activity. The simulated male-male coalitional competition in these games causes physiological reactions that young men may find appealing because it taps their evolved motivation to engage in male-male competitions in military and political strategizing (Oxford, Ponzi, & Geary, 2010). This would also be in line with Miller’s courtship model (Miller, 1999) in that young men face a stronger intrasexual selection than women. Similar to other cultural products, creating video games and, eventually, competing with other men in game context provides males with the opportunity to display their qualities to be selected as mates (intersexual selection; see Lange & Schwab, this volume). The evolutionary aspect of video

games may also be found in the hypermasculine portrayal of male video game characters as strong, muscular, ruthless, and aggressive (for an overview, see Scharrer, 2013)—an exaggeration of the evolved competitive male that women find highly attractive in mating partners (Oxford et al., 2010).

In contrast to competitive men, evolution forced women to develop a proclivity to nurture and a preference for long-term mates who could support a family (Eagly & Wood, 1999; Wood & Eagly, 2012). Therefore, strong and dominant males signal protection and safety for a woman's offspring (Buss, 1989), perfectly typified by the hypermasculine male characters in video games. In contrast, female game characters are often displayed as attractive and sexually suggestive with revealing clothing or at least partially nude (Beasley & Standley, 2002; Downs & Smith, 2010; Ivory, 2006). From an evolutionary perspective, these forms of presentation are appealing to men because a woman's physical attractiveness confers information about her reproductive values (Buss, 1989). This is further supported by the thin, yet curvaceous body of female game characters, with their perfect female lumbar curvature that appeals to evolved mate preferences (Lewis, Russell, Al-Shawaf, & Buss, 2015).

Although there are undeniably biological differences between the sexes, society converts these differences to prescribed gender roles that comprise desirable as well as undesirable qualities for men and women (Berger & Krahé, 2013). Social structural theories see a society's evolved division of labor between the sexes as the main engine of sex-differentiated behavior, thus summarizing the social constraints that men and women face (Eagly & Wood, 1999; Wood & Eagly, 2012). Femininity and masculinity as relatively stable ascriptions of gender attributes are, according to this perspective, not biologically determined but thought to reflect learned shared beliefs regarding the two sexes in the process of socialization and social learning. According to these notions, children will be rewarded only for consuming gender-role congruent media content. Alternatively, they will learn gendered media preferences by observing and imitating same-sex role models (Wühr et al., 2017).

Women and men seek to accommodate to these shared beliefs by acquiring skills related to the different gender roles. For women, the gender role is strongly related to physical attractiveness (e.g., Zurbriggen et al., 2010) and includes learning domestic skills (e.g., cooking). In contrast, the male gender role includes learning skills associated with dominant behavior related to power and status that are important for the paid economy (Eagly & Wood, 1999)⁴.

Cultivating Stereotypes: Gender Roles in the Media

In the socialization of cultural gender norms, the media has become an influential agent, persistently transporting stereotypical portrayals of gender (Scharrer, 2013). These gender roles may serve as a reference to shape the construction of an individual's identity and the conceptions of others. According to cultivation theory (Gerbner, Gross, Morgan, & Signorielli, 1980), repeated exposure to media content influences how social realities are perceived and understood. For example, typecast representations of women in the media are thought to reinforce traditional gender roles (Brinkman, Khan, Jedinak, & Vetere, 2015), and objectifying depictions of women enhance dominance over women as part of the masculinity ideology (Galdi, Maass, & Cadinu, 2014). Because video games are interactive and designed for iterative

play, they may enable repeated and distributed learning about gender roles with enduring effects. In this regard, the appearance and behavior of video game characters may serve as agents of gender socialization among youth, with greater amounts of exposure to video games more strongly predicting the endorsement of gender stereotypes in the players (Bègue, Sarda, Gentile, Bry, & Roché, 2017). However, this assertion leaves the question unanswered, why men and women prefer different media content in the first place. Research on the origin of gender stereotypes concerning media preferences is almost nonexistent (Wühr et al., 2017). Contrary to theories of social learning, however, one study found a relation between prenatal testosterone and media-related behavior. Compared to girls, for instance, boys were found to be less prone to use picture books in preschool age (Lange, 2015).

The “Male Gaze”: Gender and Gender Roles in Video Games

Lange and Schwab (2015) provided a thorough analysis of video game designers and found the creation of video games to be dominated by young men. In line with Miller’s courtship model (Miller, 1999), the authors argue that creating cultural products like video games might serve as means in intersexual selection that increases young men’s attractiveness by signaling creativity and (male) genetic quality to females. In this regard, competitive game contexts that even feature desired female mating partners as sexually objectified game characters in stereotypical roles (e.g., damsel in distress) would perfectly fit the forces and necessities of intrasexual selection, too.

In contrast to understanding video game production and the portrayal of stereotypical gender roles as courtship displays, however, Lynch and colleagues (2016) assume that the interaction of different contributing factors leads to a negative self-perpetuating cycle that was first described by Williams (2006). According to this model, the underrepresentation of women in the video game industry leads to the dominance of male game characters and a sexually objectified male gaze characterized by gender role stereotypes, including sexualized female characters that embody characteristics appropriated from masculine gender norms. Because women perceive these depictions and the assigned female roles negatively, they may be discouraged from gaming and eventually avoid the video game medium (Lynch et al., 2016). Lucas and Sherry (2004) present a similar line of reasoning in that video games represent a “boy domain”, where the male gaze is in line with the culturally shared view and the result of social roles in a patriarchal society, where dominance is allocated to men. Therefore, playing video games will create opportunities for young men to meet their basic motivation to engage in (social) competitive interaction and experience positive emotions. In contrast, young women playing video games may risk social sanctioning, and refraining from playing will preclude them from meeting the basic needs they share with young men, namely inclusion and affection (Lucas & Sherry, 2004). However, as was already mentioned in the introduction, women play games at a rate nearly equal to men. Therefore, the present line of arguments needs to be qualified by gender differences in what games men and women prefer (e.g., Cruea & Park, 2012), and how they play (Poels et al., 2012; Williams et al., 2009).

Many Males, Few Females—Mismatch in Numbers of Leading Male and Female Characters

Compared to men, women are underrepresented in many media forms, including video games. Of the 597 characters, Beasley and Standley (2002) coded in 47 games only 82 (or 13.5%) were women. More recently, Downs and Smith (2010) found only 70 female characters (14.3%) in 60 video games. Moreover, female characters most frequently appeared as secondary or tertiary characters⁵. For women, the absence of (leading) female game characters means a lack of opportunities for identification, at least with socially shared female gender roles. However, identification with game characters is essential not only for girls' gaming motivations in role-playing games (van Reijmersdal, Jansz, Peters, & van Noort, 2013) but for video game enjoyment in general (Hefner, Klimmt, & Vorderer, 2007).

Hack'n'slay. And Save the World. Game Content as a Problem

Similar to real physical violence (Archer, 2004), males show greater preference for violence in video games than females (Hartmann et al., 2014). Motivational differences between male and female gamers have been attributed to males being less empathetic than females, their greater tendency to morally justify physical violence, and their stronger need to play aggressively (Hartmann et al., 2014). These findings are in line both with gender role theory (e.g., Wood & Eagly, 2012) and the evolutionary perspective (Oxford et al., 2010; see also Lange & Schwab, this volume), because violent games provide a perfect way to enact the male gender role, including demonstrations of 'heroic deeds'. Also, violent games satisfy the male need to display competence through competition and achievement. In contrast, women prefer games that are compatible with the female gender role, including playing for social reasons, like relationship expression and maintenance (Williams et al., 2009). It has been suggested that one particular appeal of video games lies in the opportunity for the player to interact with environments similar to that of the EEA (Astolfi, 2012), that is, the games' resemblance to ancient environments that formed humans' oldest adaptive instincts (Barrett, 2010).

The Male Hero Saves the Half-Naked Princess. Gender Portrayals in Video Games

It is not necessarily the uninviting content that keeps women from playing video games. Rather, they may be more revolted by the stereotypic roles and behavior patterns as well as the sexualized portrayal of female game characters. Violent fighting games, for example, feature more sexualized female characters than other game genres. In contrast, role-playing games are popular among female gamers despite their sometimes violent content. However, they also have a substantially lower rate of sexualization (Lynch et al., 2016).

While strong and heroic male characters and weak female characters that are in need of protection essentially mirror gender stereotypes often encountered in the general media landscape (Collins, 2011), video game portrayals of men and women are hypergendered, presenting exaggerated biological features of the two sexes (e.g., male muscles, female breast)

in the form of so-called supernormal stimuli that are known to appeal to humans' adaptive instincts (Barrett, 2010). Male characters thrive on action and their readiness to engage in combat, or similar endeavors of a physical nature (Yang, Huesmann, & Bushman, 2014). Female game characters are often shown "as passive beings, kidnapped princess to rescue, or sex objects to win or to use" (Bègue et al., 2017, Introduction, para. 1). The physical appearance of game characters is accentuated by letting female characters showcase the stereotypically feminine physique in sexualized clothing, whereas male characters are often portrayed as powerful aggressors molded in a way that overemphasizes their physical strength (Beasley & Standley, 2002). Empirical data support this analysis to the effect that both male and female participants rate female video game characters as significantly more helpless and sexually provocative than male characters, irrespective of how masculine participants perceived themselves (Ogletree & Drake, 2007).

In a recent analysis, Near (2013) found support for a substantial economic motive for sexualization and marginalization of women in video games. Not surprising, sales numbers for teen and mature games were positively related with box art depicting noncentral sexualized female characters, thus appealing to basic reproductive motivations in the target group. In contrast, sales were lower when female characters were central or when no male characters were present on the game cover. Exposure to stereotypical depictions of females will thus be more likely than exposure to alternative depictions (Near, 2013). According to the biosocial construction account (Wood & Eagly, 2012), this should lead to distorted gender representations in the players, and further amplify gender stereotypes of hyperfemininity (i.e., exaggerated adherence to a stereotypic feminine gender role; Murnen & Byrne, 1991) and hypermasculinity ("macho"; Ben-Zeev, Scharnetzki, Chan, & Dennehy, 2012).

In sum, the male gaze in designing male and female video game characters follow the primitives of both evolutionary psychology and social learning theory. Whereas male game characters symbolize an exaggeration of the evolved competitive male (Oxford et al., 2010), which women find highly attractive in mating partners, female game characters represent males' sexually suggestive objects of desire that perfectly match evolved mate preferences (Lewis et al., 2015). In addition, game characters of both sexes are predominantly presented in stereotypical roles (e.g., as competitive fighters who protect the weak) that incorporate the traditional sexual division of labor and, thus, provide role models for social learning (Bussey & Bandura, 1999).

Effects on All Levels? Gender Stereotypes and Media Effects Research

Media depictions of women in professional and domestic roles are assumed to reinforce traditional gender roles (Brinkman et al., 2015). Within the frame of objectifying depictions of women, media use appears to be linked to greater dominance over women as part of the masculinity ideology (Galdi et al., 2014). Various meta-analyses found that beauty ideals in the media significantly lead to higher body dissatisfaction in women (Grabe, Ward, & Hyde, 2008) as well as men (Barlett, Vowels, & Saucier, 2008). For the video game medium, this has been attributed to unrealistic body proportions of female game characters, which are thinner than women are in reality (Martins, Williams, Harrison, & Ratan, 2009), but serve as supernormal stimuli related to old adaptive instincts (Barrett, 2010). This may lead to further socialization of

female gamers that femininity is strongly about physical attractiveness and the male gaze. However, the influence of media may be substantially smaller than other factors, including peer competition (Ferguson, Muñoz, Garza, & Galindo, 2013), or may affect only those with preexisting body dissatisfaction (Ferguson, 2013).

In general, most studies on the links between video game and sexist attitudes tested short-term effects (Bègue et al., 2017) that follow variations of social learning theory in explaining observed gender differences and effects. For example, men's preference for video games with sexist contents was associated with a higher level of protective, patronizing attitudes toward women (i.e., benevolent sexism; Stermer & Burkley, 2015). In addition, both male and female participants were more aggressive after playing a violent game as a male character than as a female character (Yang et al., 2014). In their experimental study, Behm-Morawitz and Mastro (2009) found that after playing a sexualized version of the *Lara Croft* character in the *Tomb Raider* action video game series for 30 minutes, female participants indicated lower self-efficacy and less favorable attitudes about women's physical capabilities than their female colleagues who played a nonsexualized version of the same character.

Exposure to female gender stereotypes, such as the sexually potent vamp character had direct adverse effects on individuals' rape myth acceptance (RMA; Fox & Bailenson, 2009), indicating an increase in approving general beliefs about rape that serve to deny and justify male sexual aggression against women (e.g., "women ask for it"; Lonsway & Fitzgerald, 1994). Exposure to sexualized avatars also led to more self-objectification and greater endorsement of rape myths in women (Fox, Bailenson, & Tricase, 2013; Fox, Ralston, Cooper, & Jones, 2015). Similar adverse effects were found for male participants after watching video clips that showed sexual objectification of women and violence against women in video games (Beck, Boys, Rose, & Beck, 2012), and for adolescent boys and girls after playing a sexualized compared to a nonsexualized female avatar in a violent game (Driesmans, Vandenbosch & Eggermont, 2014). Results from the few longitudinal studies on the relationship between video game use and gender beliefs are mixed. In one study, long-term exposure to violent video games was related to greater RMA (Dill, Brown, & Collins, 2008). In contrast, there was no cultivation effect on sexist beliefs and attitudes in a longitudinal study over a 3-year period (Breuer, Kowert, Festl, & Quandt, 2015).

The Times They Are A-Changin'? Current Trends in Gender Role Presentations

'Standard' forms of presenting male and female video game characters are in-line with both evolutionary accounts and the social structuralist perspective. The central topics of many games that feature humanoid characters are reminiscent of the early adaptive problems of humankind, now taking place in virtual settings (i.e., competition, conflict, fighting for survival; e.g., Mendenhall, Saad, & Nepomuceno, 2010; see also Koban, this volume). An attack by aliens or foreign forces, a zombie apocalypse, or a simple capture-the-flag scenario, all call for strong and heroic characters that protect the weak, whereas first-person shooters attempt to recreate the adrenaline rush of hunting and raiding in the EEA (Mendenhall et al., 2010).

Consequentially, most games feature male characters over-accentuated in their hypergendered portrayal, thus conforming to the combative and aggressive attributes of masculinity. In contrast, women typically appear sexually suggestive, but weak and only in supporting roles. However, the dominating male character and the secondary and sexually submissive female also perfectly represent the division of labor that serves as the basis for gender role learning according to the social structural account but are also perfectly in line with evolutionary assumptions.

Meanwhile, the actual gender of a game character *per se* may not be indicative of its appeal to players. Rather, females' player motivations and play styles vary as a function of their gender identity rather than their biological sex (Poels et al., 2012). Also, players' perceptions of the character's gendered attributes determine the appeal of a game and the inclination to identify with the game character (Melzer & Engelberg, 2016), with many male game characters offering little that women would naturally feel inclined to identify with. Avoiding alienating women with stereotypical (i.e. sexist) content may be an important step to close the gender gap that still exists in video game use (e.g., Fox & Tang, 2014). A growing number of positive portrayals of females in games may be key to this development (Lynch et al., 2016). According to social identity theory (Tajfel, 1978), this may cast the 'ingroup' (i.e., women) in a favorable light. Consequently, this should lead to an increase of women's interest in gaming as hobby or profession and to more favorable and equitable attitudes toward female gamers (Lynch et al., 2016). It is important to note that male participants do not perceive more 'feminine attributes' in game characters negatively (Melzer & Engelberg, 2016). Thus, a stronger 'feminine touch' in video games is therefore unlikely to repel male gamers. Moreover, women who realize that leading game characters are portrayed in ways they may more strongly identify with are also more likely to become customers or may even join the gaming industry (Lynch et al., 2016). In this regard, *Lara Croft* is an important pioneer for leading female game characters, and the evolution of her physical appearance in the *Lara Croft* game series is especially interesting. As the heroine of the video game series *Tomb Raider*, she was among the first female characters who stood out with her role as the main protagonist in the action and adventure genre, which clearly set her apart from the majority of female characters in the world of video games (Jansz & Martis, 2007). Interestingly, a more realistic and less sexualized physical appearance was added to her nonstereotypical role over the years. At the same time, by adding more positively connoted feminine attributes (e.g., empathy, emotional responses) to her rather 'flat' character in the first game titles made the *Lara Croft* character appear more complex and 'real'. Nonetheless, *Lara Croft* is still the exception from the rule, and female game characters are more often than not just expandable sidekicks or mere embellishment for the male protagonist. Although there are more playable female characters now, who also appear in more positive ways, the percentage of primary female characters has not grown over time (Lynch et al., 2016).

It appears that, with regard to video games, we are still stuck in a 'male space'. With regard to the video game industry, overcoming the male-space-situation by increasing the number of female game designers and producers should be a matter of course to fully cover the interests and preferences of both female and male gamers. However, overcoming the thinking of video game characters in stereotypical role concepts of 'Mars versus Venus' (Hayes, 2005) rests a future achievement that requires progressing to some higher levels. Moreover, given how

much video games successfully draw on our ancient evolutionary background and the evolved instincts and dispositions that gamers find particularly appealing raises the question whether overcoming stereotypical gender roles in video games would be possible—or even welcomed at all by the majority of consumers.

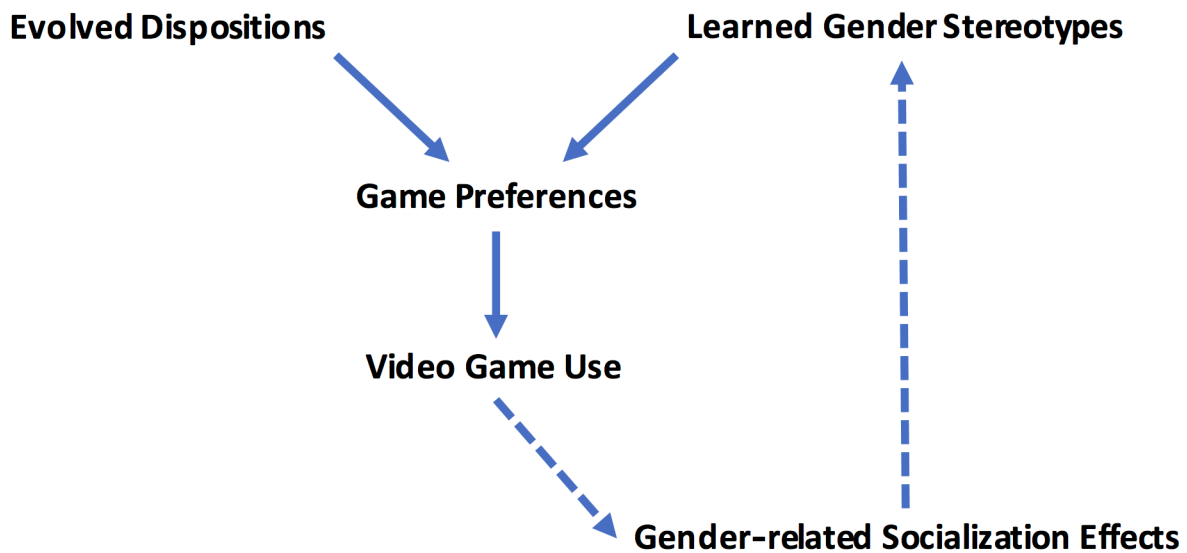


Figure 16.1 Joint contribution of evolved dispositions and learned gender stereotypes on video game preferences, together with the hypothesized feedback loop of video game use and socialization of gender stereotypes.

Ultimately, the potentially reinforcing effect of gender stereotypes through video games might even be mutually linked to the domination of gender specific topics in these games leading to similar, yet gender-specific effects on the players: Whereas male gamers are (biologically) inclined to prefer games featuring female characters that are portrayed in sexualized and hyperfeminine ways, women feel less attracted to these games. Hence, they will also be less exposed to the gender-related socialization effects of these gendered media. In contrast, however, male gamers may feel less attracted to games that feature stereotypical topics related to the oldest adaptive instincts in women (e.g., nurture), which will result in less exposure to gender-related socialization in these games. This confound of gender-specific media selection due to evolved dispositions and the gender-socializing effects of gendered games might, therefore, lead to another self-perpetuating cycle, entrenching gender stereotypes in gamers (see Figure 16.1). Albeit preliminary, such a closed-feedback concept would also be in line with integrative models of media use and media effects that are well established in media psychology (e.g., Rubin, 1994).

Notes

¹ www.theesa.com/wp-content/uploads/2016/04/Essential-Facts-2016.pdf (04.17.2017).

² https://ukie.org.uk/research#fact_sheet (04.17.2017).

³ www.biu-online.de/wp-content/uploads/2016/07/BIU_Jahresreport_2016.pdf (04.17.2017).

⁴ Interestingly, the active suppression of evolved dispositions to prescribed gender roles may even result in greater gender differences in behavior. In a German study, for example, kindergartens with a gender-neutral education policy reported stronger gender differences in aggressive behavior than traditional kindergartens (Nickel & Schmidt-Denter, 1980).

⁵ It is important to note that the dominance of male game characters is also likely due to the fact that game protagonists need to feature characteristics of capability and strength to signal potential success and increase in (game) status. According to the evolutionary theory, these male characteristics are desired by men and perceived as attractive by women (e.g., Buss, 1994; Greenlees & McGrew, 1994).

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